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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,547	01/22/2007	Oleg Jurievich Abramov	111150-005USA	9815

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PROCOPIO, CORY, HARGREAVES & SAVITCH LLP
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SAN DIEGO, CA 92101

EXAMINER

LE, HOANGANH T

ART UNIT	PAPER NUMBER
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2821

NOTIFICATION DATE	DELIVERY MODE
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11/21/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTONotifications@procopio.com

Office Action Summary	Application No. 10/536,547	Applicant(s) ABRAMOV ET AL.	
	Examiner HoangAnh T. Le	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/15/08&5/26/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Preliminary Amendment filed on May 26, 2008 is acknowledged.
2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 14 and 16, "the high-frequency communications lines" has no antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lefevre (the US Patent No. 5,831,578).

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Regarding claim 13, the Lefevre reference teaches in figures 1-3 a planar directional antenna including a dielectric plate 2 carrying a flat active antenna element 3 mounted by means of mounting elements a,b,c parallel to and spaced from the plate 2; with the surface of the plate that faces the active element being metallized and serving as antenna reflector 1; with the mounting elements a,b,c made as pins cut in the body of the active antenna element and bent during mounting (figures 1 and 3).

Regarding claim 14, wherein one b of the pins is isolated from the metallized surface 1 of the plate and is designed to provide connection with the high- frequency communications line (figure 3).

Regarding claim 15, wherein the surface of the plate, opposing the metallized one, is additionally equipped with a high-frequency communications line made as a microstrip connected to the pin (figure 2). Regarding claim 16, wherein two of the pins b,c are isolated from the metallized external surface of the plate and are located on orthogonal straight lines passing through the center of the active element; with the pins providing connection with the high- frequency communications lines (figures 1 and 2).

Regarding claim 17, wherein the surface of the plate, opposing the metallized one, is additionally equipped with high-frequency communications lines, power divider and phase shifter made as microstrips and connected in series; with the phase shifter being connected to the pins (figure 2).

Allowable Subject Matter

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7. Claims 1-12 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: none of the cited art discloses at least three planar directional antennas, each of which is made as a dielectric plate carrying a planar active element of the above antenna mounted by mounting elements parallel to and spaced from the plate; with the plate surface that faces the active element being metallized and serving as an antenna reflector; the plates being interconnected along their edges in such a way as to form lateral facets of a hollow frame shaped as a regular prism with metallized external surfaces and set on its base; the end face of the frame being made as a dielectric plate having its external surface metallized and carrying an antenna commutation switch on the its internal surface; the antenna switch being connected to the control unit of the antenna commutation switch by means of control communications lines and connected to the active antenna elements by means of high-frequency communications lines as recited in claim 1.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HoangAnh T Le/
Primary Examiner, Art Unit 2821